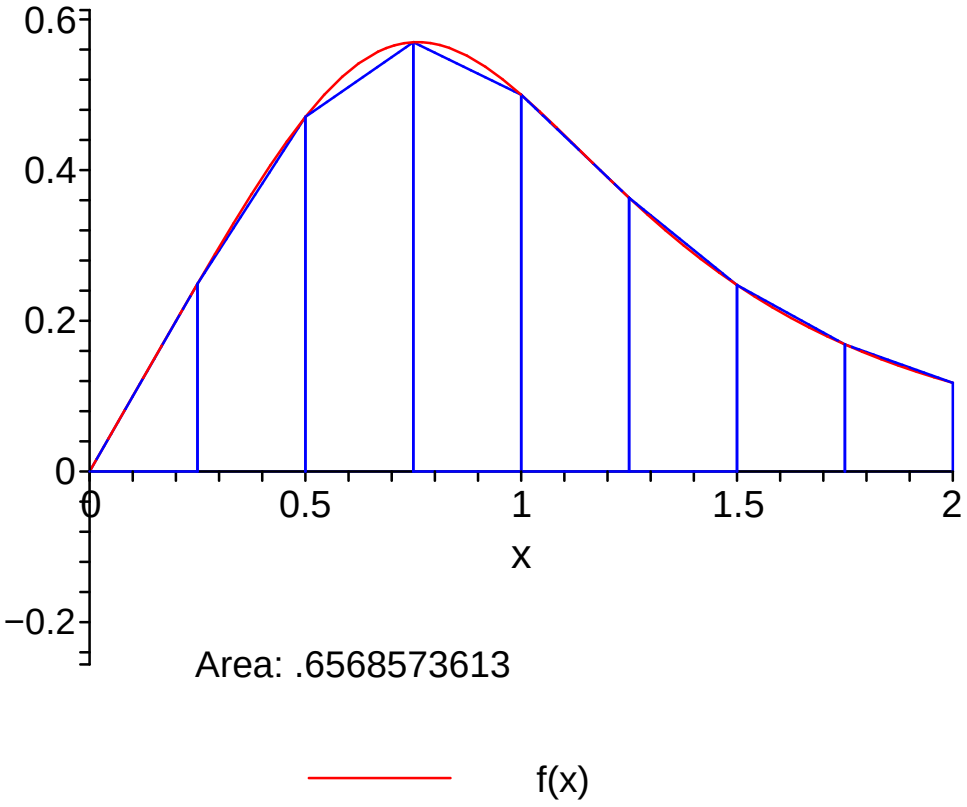
```
> restart;
> # Trapeziod and Simpson's method for numerical integration.
> with(Student[Calculus1]);
```

[*AntiderivativePlot*, *AntiderivativeTutor*, *ApproximateInt*, *ApproximateIntTutor*, *ArcLength*, *ArcLengthTutor*, *Asymptotes*, *Clear*, *CriticalPoints*, *CurveAnalysisTutor*, *DerivativePlot*, *DerivativeTutor*, *DiffTutor*, *ExtremePoints*, *FunctionAverage*, *FunctionAverageTutor*, *FunctionChart*, *FunctionPlot*, *GetMessage*, *GetNumProblems*, *GetProblem*, *Hint*, *InflectionPoints*, *IntTutor*, *Integrand*, *InversePlot*, *InverseTutor*, *LimitTutor*, *MeanValueTheorem*, *MeanValueTheoremTutor*, *NewtonQuotient*, *NewtonsMethod*, *NewtonsMethodTutor*, *PointInterpolation*, *RiemannSum*, *RollesTheorem*, *Roots*, *Rule*, *Show*, *ShowIncomplete*, *ShowSteps*, *Summand*, *SurfaceOfRevolution*, *SurfaceOfRevolutionTutor*, *Tangent*, *TangentSecantTutor*, *TangentTutor*, *TaylorApproximation*, *TaylorApproximationTutor*, *Understand*, *Undo*, *VolumeOfRevolution*, *VolumeOfRevolutionTutor*, *WhatProblem*]

```
> ApproximateInt(x/(1+x^4),x=0..2,method=trapezoid,partition=8,output=plot)
```

An Approximation of the Integral of
f(x) = x/(1+x^4)
on the Interval [0, 2]
Using the Trapezoid Rule
Approximate Value: .6629088318

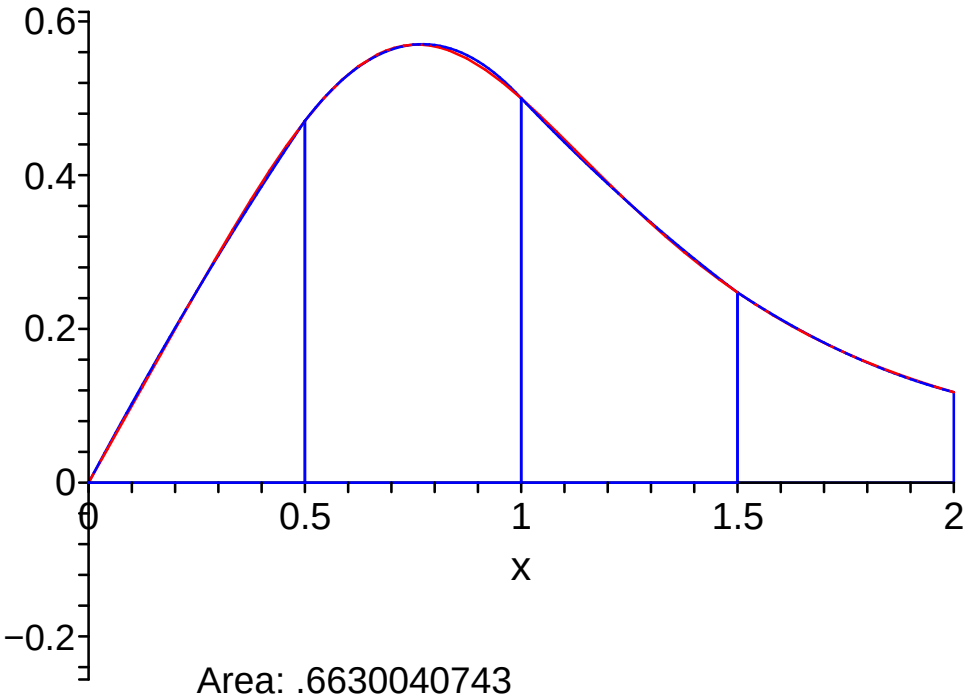


Area: .6568573613

f(x)

```
> ApproximateInt(x/(1+x^4),x=0..2,method=simpson,partition=4,output=plot);
```

An Approximation of the Integral of
f(x) = x/(1+x^4)
on the Interval [0, 2]
Using Simpson's Rule
Approximate Value: .6629088318



Area: .6630040743

f(x)

>